State of California

EMPLOYMENT TRAINING PANEL

M e m o r a n d u m

To: Panel Members Date: June 22, 2007

From: Ruby Cohen, Manager Analyst: J. Daunt

Subject: One-Step Agreement for **INTEL CORPORATION**

CONTRACTOR:

- Training Project Profile: Retraining: Companies W/Out-Of-State Competition
- Legislative Priorities: Stimulating Exports/Imports
  Promotion Of California's Manufacturing Workforce
- Type of Industry: Manufacturing
- Repeat Contractor: Yes
- Contractor's Full-Time Employees
  - *Worldwide:* 92,000
  - *In California*: 12,100
- ETP Trainees Represented by Union: No
- Name and Local Number of Union Representing ETP Trainees: N/A

CONTRACT:

- Program Costs: $623,700
- Substantial Contribution: $0
- Total ETP Funding: $623,700
- Total In-kind Contribution: $1,600,000
  - *Trainee Wages Paid During Training:* $1,200,000
  - *Other Contributions:* $400,000
- Reimbursement Method: Fixed-Fee
- County(ies) Served: Santa Clara, Sacramento

INTRODUCTION:

Intel Corporation (Intel) manufactures semiconductor chips, along with boards, software building blocks, systems, and other computer components designed for networking and communications products.

Intel is eligible for standard ETP retraining with enhanced reimbursement under Title 22, California Code of Regulations (CCR), Section 4416(i)(1), because the Company is a priority industry manufacturer. This will be the second ETP training project with Intel.

Intel's proposal seeks assistance from ETP for occupational training at four California sites. The training plan is designed to support Intel's redeployment system, which works as an alternative to layoffs in times when business slows, and allows added flexibility that is expected to improve the Company's overall productivity.

MEETING ETP GOALS AND OBJECTIVES:

Intel proposes training that will further the following ETP goals and objectives:

1. Foster retention of high-wage, high-skilled jobs within the state.
2. Promote job retention in industries threatened by out-of-state competition.
3. Foster retention of manufacturing jobs within the state.

TRAINING PLAN TABLE:

Job Number / Trainee Type	Types Of Training	No. Retain	No. Class / Lab Videocnf. Hrs.	No. CBT Hrs.	Cost Per Trainee	Hourly Wage After 90 Days
Job #1 / Retrainee	MENU: Business Skills Computer Skills Continuous Improvement Manufacturing Skills Advanced Technology	550	24-200	0	$1,134	$14.65-$80.00

Wages After 90-Day Retention

Occupations

Analysts
Information Technology Personnel
Developers
Trainers
Engineers
Program Managers
Technology Manufacturing Technicians
Managers

Health Benefits Used To Meet ETP Minimum Wage:	Turnover Rate	% Of Mgrs & Supervisors To Be Trained:
Although the company pays health benefits for its employees, the hourly contribution is not being used to meet ETP minimum wage requirements.	12%	6.4 %

Other Employee Benefits:

In addition to health and dental benefits, the company provides paid holidays, paid vacation, life insurance, pension, disability.

COMMENTS / ISSUES:

- ***Frontline Workers***

  All participants in this project meet the Panel definition of frontline workers under Title 22 CCR, Section 4400(ee), except for 35 exempt managers / supervisors, constituting 6.4 percent of the trainee population.

- ***Production During Training***

  The proposed Contractor agrees that during ETP-funded training hours, trainees will not produce products or provide services which will ultimately be sold.

COMMENTS / ISSUES: (continued)

- ***Record Keeping***

  Intel will be allowed to document training hours electronically through the use of a Learning Management System (LMS) in place of traditional paper-based records. The LMS will have the ability to produce electronic printouts by trainee which document all aspects of training. Intel will upload training information into the ETP internet tracking system. The technology for handling the uploading of data will be mutually agreed upon.

- ***Training Format for Advanced Technology***

  Training will take place on the production floor, with production taking place during this phase of training, but it is the *trainer* who performs, and is responsible for, production, not the trainee. All of the Company's production records will list the trainer, not the trainee, as the person responsible for production. The trainee is with the trainer, observing, in a non-production training mode.

  This ETP-funded portion of Advanced Technology training is estimated to require, on average, 31 hours for each trainee; however, the approach is purposely designed to be flexible, such that individuals who require additional time will receive additional training.

  In the next phase, the trainee moves into a position of greater responsibility, involving actual work performed by the employee. This phase is not part of the curriculum included in this proposal, and will be funded by the Company. Procedures require that the trainee remain under the direct and close supervision of the trainer for this and the previous portion of training, until training on a piece of equipment is complete and the trainee has been certified to operate the equipment independently.

- ***Funding Request***

  The proposed amount is reduced to the amount earned by Intel on its previous agreement. Intel plans on requesting an amendment for additional funding should performance on this new proposal warrant it.

RECOMMENDATION:

Staff recommends that the Panel fund the proposed training for this priority industry applicant, because it supports economic growth in California by assisting in the development and manufacture of emerging products that meet a growing global customer demand. In addition, a highly skilled workforce will result in the retention and creation of high wage jobs as Intel's California sites become more competitive.

NARRATIVE:

Founded in 1968 to build semiconductor memory products, Intel, according to representatives, introduced the world's first microprocessor in 1971. Microprocessors are also called central processing units (CPUs). They control the central processing of data in personal computers, servers, workstations, and other devices.

A significant portion of Intel's manufacturing today is of silicon chips, known as semiconductors, which are etched with interconnected electronic switches. Intel representatives state that the Company's developments in semiconductor design and manufacturing have made it possible to decrease the size of circuits etched into silicon, permitting more transistors to be used on each individual chip. This allows for more chips to be made from each silicon wafer, resulting in smaller and faster microprocessors and other semiconductor products that consume less power and cost less to manufacture.

Company representatives state that a primary purpose of the training is to support Intel's redeployment program, in addition to providing training in the occupational skills needed at the four Intel facilities included in the proposal. Redeployment allows Intel to move employees to areas of greater need and thus greater return, during changes in business conditions. Under the program, employees are allowed to seek other jobs within Intel. The representatives add that a major component of redeployment is cross training, providing an alternative to layoffs during business adjustments.

Because the proposed curriculum addresses recent technological developments in the industry, according to the representatives, Intel will be more successful at making internal redeployments of its California workforce, necessitated by the aggressive competitiveness under current conditions in the computer and business technology industry. With a broadening of skills achieved by the proposed training program, eligible employees can more easily be moved from areas within the Company with surpluses to areas where additional employees are required, and thus remain employed at Intel.

Business Skills will include business planning, project accounting / management skills, cross training in financial areas, risk management, new standard processes for financial systems, technical training to facilitate project management, and related skills.

Computer Skills training will provide trainees with the skills needed to set up, operate and maintain hardware and software computer support systems to allow significantly improved data management, planning, web-based applications, and related technical processes. Training includes programming and technical operations in software applications, as well as in improved operating procedures.

Continuous Improvement will provide the skills that will allow employees to work more collaboratively together. The continuous improvement portion of the curriculum includes team skills, change processes, communication skills, process control techniques, quality systems training, and related skills.

Manufacturing Skills training is designed to provide trainees with the knowledge and skills needed to design and engineer products that interface realistically and correctly with a customer's workplace needs and requirements. The skills provided will include basic architecture, engineering and design overviews, new product knowledge, components interfacing, and related skills.

NARRATIVE (continued)

Advanced Technology: Company representatives state that Intel's California Technology Manufacturing Center in Santa Clara is one of the most advanced semiconductor fabrication facilities in the world. The facility is a large, class-1 clean room housing 50 to 60 different multi-million dollar semiconductor manufacturing machines, known as "tools." Due to recent advances at Intel and in the industry, a significant portion of the proposed curriculum includes training that provides skills in Advanced Technology. Trainees will learn to operate equipment that they have not previously been certified to operate. This training will also allow trainees to perform advanced maintenance and troubleshooting functions on equipment they have operated in the past. A trainer is assigned to each trainee during the entire training process. According to the representatives, training must be provided on a one-to-one basis because of the specialized nature of the equipment involved in the training, which includes coat/develop tracks, ion implanters, diffusion furnaces, rapid thermal processors, chemical vapor deposition tools, physical vapor deposition tools, wet clean/wet etch chemical benches, plasma dry etch tools, electrochemical platers, scanning electron microscopes, overlay measurement tools, film thickness measurement tools, defect inspection tools, photoresist ashers, chemical mechanical polishers, and optical inspection tools.

Commitment to Training

ETP funding will not displace the applicant's resources for training. Intel representatives state that the annual training budget is approximately $4,000,000 for the Company's California facilities.

Representatives state that the types of training provided by Intel include new-hire orientation, general safety, system upgrades, internal processes, new manager training, general business processes, and business ethics, adding that this training is held on a recurring basis to enable employees to enroll and attend as needed. The current proposal does not contain any of these types of training.

According to the representatives, while the training proposed in the current application appears to be similar to training included in Intel's previous ETP project, additional ETP assistance will enable Intel to provide a higher level of training on a broader scope. For example, the proposed curriculum has been designed so that employees are provided with the more highly advanced skills necessary to keep current with technological advancements that had not been developed at the time of the Company's first ETP application. The representatives add that these advancements in occupational skills, which the current proposal addresses, will facilitate more successful internal redeployments of Intel's California workforce, necessitated by the aggressive competitiveness under the current conditions of the computer and business technology industry.

Concerning the anticipated beneficial effects of the proposed ETP training program, the representatives state that receiving support from the Panel will further solidify Intel's objective of creating and retaining a highly trained workforce in the greater Sacramento and Santa Clara areas. They add that the training program will allow Intel to continue to provide a high volume of new training for our core workforce, and to continue to provide high levels of technical and soft skills training after completion of the ETP Agreement term, enabling future development of the California-based employee population.

SUBCONTRACTORS:

None.

THIRD PARTY SERVICES:

None.

PRIOR PROJECTS:

This will be the second ETP training project with Intel. The following are the completed project statistics for the previous ETP Agreement with this Contractor:

PRIOR PROJECTS							
Agreement Number	**Locations (Cities)**	**Term**	**Contract Amount**	**Amount Earned**	**% Earned**	**Planned In-kind Contribution**	**Reported In-kind Contribution**
ET03-0308 Retrainee	Sunnyvale, Santa Clara, Folsom, Sacramento	05/05/2003 - 05/04/2005	$1,688,154	$623,847	40%	$6,000,000	$2,218,000

Comments: The Contractor attributes the less than favorable results of this project mainly to the fact that it was Intel's first ETP training project. Representatives state that the Contractor's experience of having completed the previous ETP project will be invaluable in allowing Intel to achieve significantly more successful performance with the training project covered under this proposal. Furthermore, in the current application Intel is requesting no more than the amount earned on the previous project.

Intel Corporation

MENU CURRICULUM

Hours
Class Lab
24-200

Trainees will receive any of the following:

Business Skills

Business Planning
Customer Relations
Financial Controls
Project Accounting
Project Management
Risk Management
Supplier Management

Computer Skills

Data Management
Enterprise Resource Planning
PC Applications
Programming Languages
Programming Systems
Standard Operating Procedures
Web Applications

Continuous Improvement

Change Process
Communication Skills
Developing Skills
Process Control
Project Management
Quality Systems
Team Skills

Intel Corporation

MENU CURRICULUM (continued)

Manufacturing Skills

Basic Architecture
Components
Design Overview
Engineering Overview
Intel New Products
Manufacturing Overview
Mobile Systems

Advanced Technology

Chemical mechanical polishers
Chemical vapor deposition tools
Coat/develop tracks
Defect inspection tools
Diffusion furnaces
Electrochemical platers
Film thickness measurement tools
Ion implanters
Optical inspection tools
Overlay measurement tools
Photolithography scanners and steppers
Photo resist ashers
Physical and chemical properties
Physical vapor deposition tools
Plasma dry etch tools
Rapid thermal processors
Scanning electron microscopes
Standard operating procedures
Tool operation
Troubleshooting
Variation
Wet clean/wet etch chemical benches